POST-DEPLOYMENT HEALTH CARE EVALUATION AND MANAGEMENT IN THE MILITARY HEALTH SYSTEM (MHS)

A National Quality Management Program Special Study

"The Post-Deployment Health (PDH) Care Evaluation and Management Clinical Practice Guideline (CPG) was implemented in February 2002. Over 75 percent of surveyed Military Treatment Facilities (MTFs) have implemented the CPG."

Why study Post-Deployment Health care?

The Post-Deployment Health guideline addressed the Department of Defense (DoD) need for a uniform approach to identifying health conditions among all beneficiaries with deployment-related concerns. The purpose of this study was to examine early implementation of this important CPG. The study focused on three areas of implementation:

- 1. Implementation at the MTF primary care clinic level
- 2. Implementation in the Outpatient Record
- 3. Implementation electronically in the Standard Ambulatory Data Record (SADR)

Measure 1 – Implementation in MTF Primary Care Clinics

What was the methodology?

The study population included all MTFs with a parent Defense Medical Information System (DMIS) Identification (ID) code. All MTF Post-Deployment Health CPG points of contact (POCs) were sent an e-mail request to participate in a web based implementation survey. Implementation was defined as answering yes to any of the six questions in the survey. The survey was conducted between October 1, 2002 and December 6, 2002.

What were the results?

The survey was sent to the Post-Deployment Health Care CPG POC at 139 MTFs of the 146 MTFs with a parent DMIS ID designation. Seven MTFs were excluded from the mailing because there were no identified POCs. Fifteen MTFs were excluded from

the final analysis due to incorrect addresses that could not be resolved, leaving a final survey population of 124 MTFs

One hundred and seven MTFs (86 percent) responded to the Survey. Over 90 percent (n=97) of the respondents reported implementing at least one component of the CPG process. Almost 40 percent of respondents (n=40) reported implementing all components of the CPG process.

Figure 1: PDH CPG MTF Implementation Survey Results by Number of Components Implemented (Six Total Implementation Components)

Implementation Results	Total
MTFs Surveyed	139
MTFs Responding To Survey	107
MTFs Implementing 1 or more CPG Components	97
MTFs Implementing 2 or more CPG Components	88
MTFs Implementing 3 or more CPG Components	83
MTFs Implementing 4 or more CPG Components	79
MTFs Implementing 5 or more CPG Components	67
MTFs Implementing all CPG Components	40

Measure 2 – Implementation in Outpatient Records

The study population included a convenience sample of outpatient records that were abstracted at selected primary care clinics at MTFs. High volume primary care clinics were selected at 119 MTFs worldwide. Forty-eight records were abstracted at each site. Implementation was defined as the presence of written documentation in the record to the question "Is this visit related to a deployment?" The site visits were conducted between July 15, 2002 and September 15, 2002.

What were the results?

Of the 119 site visits scheduled worldwide, outpatient record abstraction was conducted at 78 MTFs. Fortyone sites were not scheduled site visits because the MTF POCs reported the CPG had not been implemented. Outpatient records of 3,729 visits were examined at the 78 study sites. Sponsors accounted for 46 percent of the visits, children 19 percent of visits, and spouses 35 percent of the visits. Visits by males accounted for 45 percent of the visits.

Among the 78 MTFs where site visits were conducted, 67 MTFs had documented CPG implementation in the Outpatient Record. Sixteen visits of the documented visits (0.43 percent) were identified as being deployment related.

Measure 3 – Implementation in the Electronic Record

What was the methodology?

The study population included all SADR visits from Fiscal Year 2002 (FY02) that had an ICD-9-CM code (V70.5_6) that indicated the visit was deployment related. These visits were examined to identify patterns of diagnoses that could be related to deployment concerns.

What were the results?

The V70.5_6 code was used in the coding of 2,215 of the approximately 31.5 million outpatient visits during FY02. Of the 2215 outpatient visits with the V code, the V code was used as a primary diagnosis for 73 percent of the visits and as secondary diagnosis for 27 percent of the visits. When coded as a primary diagnosis, almost 84 percent of the visits were for males and over 96 percent were for active duty. As a

secondary diagnosis, almost 74 percent of the visits were for males and 85 percent were for active duty. Over 95 percent all visits were at Army and Air Force MTFs.

When the V code was the primary diagnosis, 324 visits (20.1 percent) had a secondary diagnosis recorded. Among the 324 visits with a secondary diagnosis coded, 607 secondary diagnoses were recorded. Many of the secondary diagnoses were not specific. Figure 2 displays all secondary diagnoses, which appeared 10 or more times out of the 607 secondary diagnoses.

Figure 2: Distribution of Secondary Diagnoses Associated with a Primary Diagnosis of V70.5_6

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Diagnosis (ICD-9-CM Code)	Frequency*	Percentage
Unspecified prophylactic measure (V07.9)	71	11.70
Medication education (V65.49_1)	69	11.38
Unspecified administrative purpose (V68.9)	55	9.06
Other counseling, not elsewhere classified (V65.49)	50	8.24
Person with feared complaint in whom no diagnosis was made (V65.5)	19	3.13
Other ill-defined conditions (799.8)	12	1.98
Termination examination (V70.5_9)	12	1.98
Pain in joint of lower leg (719.46)	10	1.65
Other diagnoses	309	50.9

^{*}Only diagnoses occurring 10 or more times are listed individually in this figure.

When the V code was the secondary diagnosis (607 visits), the distribution of primary diagnoses was consistent with previously reported deployment

related diagnoses, when aggregated into diagnostic groups. See Figure 3 for the frequency of diagnoses occurring in the four diagnosis groups with the highest frequency of diagnoses.

Figure 3: Distribution of Primary Diagnosis Groups Associated with a Secondary Diagnosis of V70.5_6

Diagnosis Group	Frequency	Percentage
(ICD-9-CM Code)		
Factors Influencing	145	24.0
Health Status and		
Contact with Health		
Services (V01-V82)		
Mental Disorders	139	23.1
(290-319)		
Diseases of the	91	15.1
Musculoskeletal		
System and		
Connective Tissue		
(710-739)		
Signs, Symptoms	80	13.3
and Ill Defined		
Conditions (780-799)		
Other Diagnosis	148	24.5
Groups		

Conclusions and Recommendations

Implementation of the CPG is well under way in the Direct Care System (DCS) as demonstrated by the results of the following performance indicators:

- Seventy-eight percent of surveyed MTFs (n=124) have reported implementing at least part of the PDH CPG.
- An eighty-six percent implementation rate was confirmed by record abstraction at the MTFs visited(n=78)
- Use of the V70.5_6 code for post-deployment concern visits has been implemented aggressively at selected MTFs since February 2002.

Based on the results of the FY02 study, the following actions for FY03 are recommended:

- Monitor MTF CPG implementation for a second year, focusing on sites that did not implement during FY02.
- Examine available electronic data to evaluate the prevalence, distribution, and timeliness of treatment for post-deployment concerns.
- Evaluate the differences in V code use as a primary and secondary diagnosis at highvolume MTFs.

Study Limitations

This study examined beginning implementation of the PDH CPG. The study did not measure the quality or completeness of the CPG implementation. Additionally, the MTF implementation survey was conducted after the records abstraction was completed; hence the apparent discrepancy between reported and documented implementation rates for the CPG.

Where to go for more information?

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